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3. A method as in claim 1 wherein the selecting of a repeater by the reflector comprises:
- (C1) partitioning the network into groups;
 - (C2) determining which group the client is in;
 - (C3) selecting, from a plurality of repeaters in the network, a set of repeaters having a lowest cost relative to the group which the client is in; and
 - (C4) selecting as the repeater a member of the selected set of repeaters.
4. A method as in claim 3, wherein the cost of a repeater is a value based on that repeater's current load and a maximum load for that repeater.
5. A method as in claim 3, wherein the cost of a repeater is a value based on a predicted cost or speed of transmission between the repeater and a client in the group.
6. A method as in claim 1 wherein the particular resource itself contains at least one other resource identifier of at least one other resource, the method further comprising:
- rewriting the particular resource to replace at least some of the resource identifiers contained therein with modified resource identifiers designating a repeater instead of the origin server.
7. A method as in claim 6 wherein the rewriting is performed by one of the repeater, the reflector or another repeater.
8. A method of processing resource requests in a computer network, the method comprising,
- (i) by a client:

51 (A) making a request for a particular resource from an origin server,
52 the request including a resource identifier for the particular
53 resource;

54 (ii) by a reflector:

55 (B) intercepting the request from the client to the origin server;

56 (C) determining whether to reflect the request to a repeater;

57 (D) when the reflector determines not to reflect the request,
58 forwarding the request to the origin server, otherwise

59 (D1) selecting a repeater to process the request;

60 (D2) providing to the client a modified resource identifier
61 designating the repeater.

62
63 9. A method as in claim 8, further comprising, when the reflector
64 determines to reflect the request,

65 (iii) by the client:

66 (E) receiving the modified resource identifier from the reflector; and

67 (F) making a request for the particular resource from the repeater
68 designated in the modified resource identifier;

69 (iv) by the repeater:

70 (G) receiving the request from the client; and

71 (H) returning the requested resource to the client.

72

73 10. A method as in claim 8 wherein the reflector determines whether to
74 reflect a request by comparing the resource identifier with regular expression patterns of
75 repeatable resources.

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15. In a computer network wherein clients request resources from origin servers, a method comprising:
providing at least one repeater;

105 providing reflectors at some of the origin servers, each reflector intercepting
106 client resource requests made to its respective origin server; and
107 each reflector selectively redirecting client resource requests for certain resources
108 to one of the repeaters.

109
110 16. A method as in claim 15 further comprising, by repeaters in the network:
111 servicing redirected client resource requests; and
112 selectively maintaining copies of requested resources,
113 whereby resources corresponding to redirected resource requests are selectively
114 migrated from their origin servers to one or more repeaters.

115
116 17. A computer network comprising:
117 a plurality of origin servers, at least some of the origin servers having reflectors
118 associated therewith;
119 a plurality of repeaters; and
120 a plurality of clients,
121 wherein each reflector is adapted to intercept resource requests made to its
122 respective origin server and to selectively redirect the resource requests to a dynamically
123 selected repeater.

124
125 18. In a computer network wherein clients request resources from origin
126 servers, a reflector mechanism associated with an origin server, the reflector mechanism
127 comprising:
128 means for intercepting a resource request made by client of an origin server;
129 means for analyzing the resource request to determine whether to service the
130 request locally at the origin server;
131 means for determining a best repeater in the network to service the request when

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19. A reflector mechanism as in claim 18 wherein the network is partitioned

means for determining which group the client is in;

means for selecting, from a plurality of repeaters in the network, a set of

means for selecting as the best repeater a member of the set of repeaters.

20. A reflector mechanism as in claim 19, wherein the cost of a repeater is a

21. A mechanism as in claim 19, wherein the cost of a repeater is a value

22. A reflector as in claim 16 wherein the resource itself contains resource

means for rewriting the resource to replace at least some of the resource

23. In a computer network wherein clients request resources from origin

means for receiving a resource request from a client;

means for determining whether the resource is available locally;

means for/ when it is determined that the resource is not available locally,

obtaining the resource from an origin server; and
means for providing the resource to the client.

24. A reflector as in claim 18 wherein the resource itself contains resource
5 identifiers, the repeater further comprising:
means for rewriting the resource to replace at least some of the resource
identifiers contained therein with modified resource identifiers designating the repeater
instead of the origin server.

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add a1
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